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#### Waste Industry Experts

Henderson Building Suite 203 2301 W Meadowview Rd Greensboro, NC 27407

tel: 336/323-0092 fax: 336/323-0093

www.JoyceEngineering.com

October 12, 2006

Ms. Toni Wyche Jones NC DENR – Division of Waste Management Solid Waste Section Permitting Branch 1646 Mail Service Center Raleigh, NC 27699



RE: CARTERET COUNTY/CRSWMA TRANSFER FACILITY

PERMIT # 16-04T: PTO RENEWAL FOR MSW TRANSFER STATION

NEWPORT, CARTERET COUNTY, NC

JEI PROJECT 618.01

Dear Ms. Wyche Jones,

On behalf of the Coastal Regional Solid Waste Management Authority (CRSWMA), Joyce Engineering, Inc. (JEI) is submitting this letter as a request for renewal of CRSWMA's Carteret County Transfer Station Permit to Operate (Permit #16-04T), which was issued October 25, 2001.

A revised Operating Plan is attached. The only notable changes to the Operating Plan are ones necessary to meet the needs of a growing waste stream. The increase in waste stream can primarily be attributed to very active development in Carteret County, resulting in a sharp increase in the volume of Construction and Demolition debris. The Authority is seeking a location for a separate C&D transfer station in Carteret County. Specific changes to the Operating Plan are:

- Average daily volume increased from 315 tons per day to 425 tons per day;
- Peak volume increased from 600 tons per day to 700 tons per day;
- Equipment list one (1) additional Spotter tractor used;
- Personnel increased from minimum of four (4) to minimum of seven (7);
- Equipment operators increased from two (2) to five (5);
- Tractors used by contracted hauler increased from five (5) to between five and eight (5-8);

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If you have any questions or concerns regarding this renewal request I can be contacted by phone at 336-323-0092, or by e-mail at <a href="mailto:scowie@joyceengineering.com">scowie@joyceengineering.com</a>.

Sincerely,

JOYCE ENGINEERING, INC.

Stephen Cowie, E.I.T. Project Consultant

Attachment (1) - Revised Operating Plan

Cc: Allen Hardison, Executive Director (CRSWMA)



# Coastal Regional Solid Waste Management Authority

# **Operating Plan**

# Carteret County Transfer Station Permit # 16-04T

**Revised October 2006** 



# Introduction

# 1.1 Purpose and Scope

This operating plan for the Carteret County Transfer Station presents general guidance for transfer station operations. This plan updates the original operating plan dated February 1992 and also the revised operating plan dated October 2001.

The Transfer Station Operating Plan consists of general information and operating procedures about:

- Source, quantity and type of waste received
- Destination of the waste
- Handling of non-conforming waste
- Equipment
- General operations
- Fire control
- Vector control

# 1.2 General Information

The Carteret County Transfer Station is located at 800 Hibbs Road, Newport, NC. The site is located about 1.2 miles off Hibbs Road in a section of the Croatan National Forest and is adjacent to the former Carteret County Landfill. From Hibbs Road, the site is accessed via a paved access road and the site is secured by fences and gates at the entrance from Hibbs Road and at the actual entrance to the permitted site.

The Authority is the owner and permit holder of the transfer station. The Authority operates the transfer station and contracts with a private company to haul the waste to the Tuscarora Landfill. The contact for the transfer station is:

Allen M. Hardison, Executive Director
Coastal Regional Solid Waste Management Authority
P.O. Box 128
Cove City, NC 28523
Telephone (252) 633-1564

# 1.3 Sources, Types and Quantities of Waste

The primary source of waste is from residents and businesses. Waste is primarily delivered to the transfer station by light trucks, commercial waste collection vehicles and contractor dump trucks. Very little residential waste is delivered to the transfer station by private citizens since Carteret County operates a convenience site near the entrance to the transfer station and accepts residential waste at no charge.

The waste stream consists of a mix of Municipal Solid Waste (MSW),
Construction and Demolition (C&D) waste and yard waste. The majority of the waste is
MSW derived from residential and commercial sources within Carteret County.

The Carteret County Transfer Station handles practically all waste from Carteret County, including residential, commercial and industrial waste. In some isolated instances, waste may be directed for disposal directly at the Tuscarora Landfill in Craven County. Such instances usually occur when a hauler has large objects that will damage the trailers during loading if accepted at the transfer station. The transfer station may accept waste generated from anywhere in Carteret, Craven and Pamlico counties, the Authority's designated service area.

Trailers for the collection and transportation of scrap tires are located at the transfer station. When full, the trailers are hauled to a contracted tire disposal facility for disposal in a permitted tire facility.

The transfer station does not accept infectious waste, medical waste, animal waste or animal carcasses, septage, sewage, radioactive waste or other hazardous waste.

Waste Volumes are as follows:

Average daily volume

425 tons per day

Peak volume

700 tons per day

Due to the heavy volume of tourism in Carteret County, there is a significant increase in waste deliveries to the transfer station in summer months. This will be a continuing factor in design and sizing of facilities. Also, development activity is very active in Carteret County and Construction and Demolition waste volume has increased sharply. The Authority is seeking a location for a separate C&D transfer station in Carteret County.

# **Transfer Station Operations**

# 2.1 General

The transfer station operates from 7:30 a.m. until 4:30 p.m. Monday through Friday and from 7:30 a.m. until 12:00 noon on Saturdays. The station is closed on Sundays and on Thanksgiving, Christmas and New Year's Day. Operating hours are sometimes modified to accommodate unusually heavy increases in waste deliveries and other operational fluctuations. In addition, waste hauling operations of trailers from the transfer station to the landfill occur before and sometimes after waste delivery hours.

Daily operations are controlled by the scale operator and the equipment operators. Operations consist of receiving and transferring waste from commercial and publicly-owned vehicles to the landfill facility. In addition, scrap tires are received at the site for

removal by a contractor and yard waste compost is sold in bulk to residential and commercial customers.

# 2.1.1 Equipment

Equipment consists of the following owned by the Authority:

- (2) Wheeled front-end loaders
- (11) Walking-floor, open-top trailers, 110 cubic yard capacity
- (2) Ejection-Blade, open-top trailers for C&D material
- (2) Spotter tractor
- (2) Scrap tire collection trailers

In addition to the equipment stationed at the transfer station, other equipment is transported to the transfer station from the Tuscarora landfill as necessary.

# 2.1.2 Personnel

The facility operates with a minimum of seven personnel: one scale operator, five equipment operators and one laborer. Trucking functions are conducted by a contracted hauler. Presently, the contract hauler uses five to eight tractors and drivers, depending on waste volume.

All employees are competent and well-trained in management of solid waste. Each employee receives adequate training in solid waste handling and safety procedures. Equipment operators complete the Transfer Station Operator's course offered by the NC Chapter of SWANA and are kept current on CEU hours. In addition, each employee is trained in solid waste screening and a screening is conducted in accordance with State of North Carolina Solid Waste rules as required.

First aid and safety supplies are provided for each in the break room. Employees are required to report all injuries or illnesses and any unsafe work condition to the Operations Manager.

# 2.1.3 Scavenging

No scavenging or salvaging of material is allowed on the site. Operational personnel may remove undesirable materials such as scrap tires and batteries from the tipping floor as needed.

# 2.1.4 Visitors

Any visitor to the facility is required to be escorted by a member of the operating staff and may be required to wear protective equipment. All visitors must check in at the scale house and identify the purpose of their visit.

# 2.2 Waste Transfer

Vehicles arriving at the site for waster transferring will first proceed across the scales. Vehicles are required to identify their waste as either yard waste, scrap tires, MSW or C&D. After determining that the waste is acceptable, weights are recorded for fee purposes and the scale operator directs the vehicle to one of four areas for unloading.

# 2.2.1 Scrap Tire Transfer

Scrap tires are unloaded by the hauler into a van-type trailer located at the western end of the site. When a trailer is full, the contract hauler brings an empty trailer and hauls the full trailer back to the permitted tire facility.

# 2.2.2 Yard Waste Transfer

Yard waste is unloaded at the designated area as shown on the site plan.

Operational personnel push the yard waste into a compact area several times per day.

Yard waste is loaded into ejection blade trailers and transported to the Tuscarora landfill

site, where it is processed into compost. Yard waste hauling generally take place on Wednesdays and Thursdays, when MSW and C&D waste volume is less.

The yard waste collection area is unpaved, but adequate site preparation has been done to allow proper access and drainage.

# 2.2.3 MSW Transfer

The MSW transfer area is a covered, 7,200 square foot tipping floor accommodating two bays for transfer. Waste unloading is performed under the direction of the equipment operators on site. Equipment operators observe each vehicle unloading and note the presence of any unacceptable waste. If unacceptable waste is detected, the driver is ordered to place the waste back into his vehicle and remove it from the site. After collection vehicles exit the tipping area, equipment operators use front-end loaders to carefully push the waste into an open-top, walking-floor transfer trailer. Equipment operators will distribute the load of waste in a manner to maximize the net load of each trailer, not to exceed maximum legal limits.

When a trailer has been filled, it is pulled from the loading bay, covered with a tarp for transfer and an empty trailer is put in its place for filling. During peak times of the day, waste may be deposited on the tipping floor faster than it can be loaded into trailers. During these times, waste is stacked by the equipment operators for later loading. During this temporary storage time, care is taken to assure that the waste is placed within the confines of the tipping floor and not outside the designated tipping area. The tipping floor will be clear of all waste at the close of business for that day. Full trailers waiting for transport are parked along the south side of the transfer station building.

Each load of MSW is transported to the Authority's Tuscarora Landfill in Craven County. Each load is weighed as it exits the transfer station to ensure compliance with Department of Transportation weight limits.

## 2.2.4 C&D Transfer

C&D waste is deposited on the C&D Loading Facility area constructed in 2001. In times of heavy rainfall, C&D waste will be deposited in a segregated area of the MSW tipping floor. This area consists of an 8,000 square foot, uncovered concrete surface with two loading bays. Prior to dumping, the equipment operator visually confirms that the waste is C&D. After the collection vehicle has exited the tipping area, the C&D waste is inspected for any large amounts of MSW that may have been mixed in the load. Any MSW is removed and deposited on the MSW tipping floor, immediately adjacent to this area. If unacceptable waste is detected, the driver is ordered to place the waste back into his vehicle and remove it from the site. After collection vehicles exit the tipping area, equipment operators use front-end loaders to carefully push the waste into an open-top, ejection-blade transfer trailer. Equipment operators will distribute the load of waste in a manner to maximize the net load of each trailer, not to exceed maximum legal limits.

When a trailer has been filled, it is pulled from the loading bay, covered with a tarp for transfer and an empty trailer is put in its place for filling. During peak times of the day, waste may be deposited on the tipping floor faster than it can be loaded into trailers. During these times, waste is stacked by the equipment operators for later loading. During this temporary storage time, care is taken to assure that the waste is placed within the confines of the tipping floor and not outside the designated tipping area. The tipping floor will be clear of all waste at the close of business for that day. Full trailers waiting for transport are parked along the south side of the transfer station building.

Each load of C&D is transported to the Authority's Tuscarora landfill in Craven County. Each load is weighed as it exits the transfer station to ensure compliance with Department of Transportation weight limits.

#### 2.3 Hazard and Nuisance Control

Hazards and nuisances at the transfer station consist of items such as dust, noise, odors, vectors, litter, fire and unacceptable waste. To reduce these hazards and nuisances, transfer station personnel are provided with and advised to use the following:

- Protective clothing
- Safety shoes
- Hardhats

- Protective Eyewear
- Gloves
- Hearing Protection devices
- Dust masks

#### 2.3.1 Dust

Dust is caused by truck traffic on roadways. The authority has paved all roadways at the facility, minimizing dust problems.

# 2.3.2 Noise

Source of most objectionable noise at transfer stations is the exhaust noise from delivery trucks. The Authority maintains the exhaust system of all its equipment in a proper working manner. To minimize noise from waste delivery trucks, the Authority monitors trucks entering the facility and advises any trucks with improper equipment to repair the equipment before returning to the site.

#### 2.3.3 Odor

Odor is difficult to control at a transfer station site. To minimize odor, all waste will be loaded into trailers as soon as possible. Operators sweep or scrub the floor with the loader bucket several times each day and the washdown water collection system is properly maintained. No waste will be allowed to remain on the tipping floor overnight; however, waste may be stored in transfer trailers overnight for unloading the following morning. The tipping floor will be washed down in whole or in part as necessary. Transfer trailers will be pressure-washed at least one time per month, with wash down water properly managed.

## 2.3.4 Vectors

Vectors include rodents, flies and mosquitoes. Control of vectors is accomplished by eliminating access to food and harborage. Complete removal of all waste and proper cleaning of the tipping floor is part of a proper vector control operation. Removal of weeds, tall grass and standing water on the transfer site reduces the areas of habitation for rodents as well as flies and mosquitoes. Extermination is used in cases of severe infestation. Periodic re-grading of low areas is performed to eliminate standing water.

# 2.3.5 Litter

Litter comes from unsecured loads of waste, the tipping floor and indiscriminate dumping. Litter control is provided as follows:

- Haulers are required to have waste covered and secured on the vehicle.
   Unsecured loads are charged double the regular rate.
- Waste is loaded into transfer trailers as soon as possible to minimize blowing of litter.
- Full loads are immediately covered to prevent litter while waiting for transportation.
- Litter is picked up on a daily basis by operating personnel.
- As required and available, prison labor is obtained to maintain the entrance road.

## 2.3.6 Fire

The Authority has an aggressive program of fire prevention. The relatively remote location precludes the likelihood of a fire leaving the premises and endangering other property. All on-site buildings and equipment are equipped with fire extinguishers and all personnel are trained in the use of fire extinguishing devices. Equipment is regularly inspected by qualified personnel. While the hoses and water supply used for wash-down purposes are not adequate for fire suppression, they are available as a supplemental measure if necessary.

If a vehicle arrives at the transfer station with a load of burning waste, the waste load will be discharged onto a remote location on the tipping floor and soaked with water until all evidence of combustion are eliminated. Only after a proper cool-down period and further inspection will the waste be loaded into a transfer trailer. Local fire departments will be notified as needed.

#### 2.3.7 Washdown Water

Washdown water is generated through drainage of waste on the MSW tipping floor and the periodic washing of the MSW tipping floor. Washdown water is collected through a floor drain system in the tipping floor and in the loading bays. From there it travels via gravity to a wet well, where it is pumped into an above ground storage tank. The tank level is monitored by operation personnel and pumped out and transported to the Authority's leachate pretreatment facility at the Tuscarora Landfill.

# 2.3.8 Unacceptable Waste

The Authority accepts only wastes for which the site is permitted. Loads arriving for deposit are first screened at the scales. Any unacceptable waste is rejected at this point and the vehicle is not allowed to proceed to the tipping area. In the event waste is inadvertently discharged at the transfer station, whether on the MSW floor or the C&D floor, an effort is made to order the delivery vehicle to remove the waste. In the event the delivery vehicle is unable or unwilling to remove the waste, the authority attempts to locate the generator of the unacceptable waste. If located, the generator is directed to remove the waste from the premises by the end of the day. If the waste is not removed by the end of the day, the Authority will arrange for removal and proper disposal and bill the cost to the generator or the hauler. In cases where the unacceptable waste constitutes an imminent threat, the Authority will notify proper State authorities and take appropriate action to immediately remove the material.